

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

REALTIME DATA LLC,

Plaintiff,

v.

SYNACOR INC.,

Defendant.

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**CIVIL ACTION NO. 6:17-CV-00126-RWS-
JDL**

MEMORANDUM OPINION AND ORDER

This claim construction opinion construes the disputed claim terms in U.S. Patent Nos. 9,054,728 (the '728 Patent); 7,415,530 (the '530 Patent) and 9,116,908 (the '908 Patent). Plaintiff Realtime Data LLC ("Realtime" or "Plaintiff") alleges that Defendant Synacor Inc. ("Synacor" or "Defendant") infringes the '728 Patent, the '530 Patent, and the '908 Patent. Plaintiff filed an opening claim construction brief (Doc. No. 46), to which Defendant filed a responsive brief (Doc. No. 48), and Plaintiff filed a reply (Doc. No. 52).¹ The parties additionally submitted their Updated Joint Claim Construction Chart pursuant to P.R. 4-5(d). (Doc. No. 55.) On April 5, 2018, the Court held a claim construction hearing. Upon consideration of the parties' arguments, and for the reasons stated herein, the Court adopts the constructions set forth below.

OVERVIEW OF THE PATENTS

¹ Defendant incorporates the arguments briefed by Defendants EchoStar and Hughes in the *Realtime v. EchoStar* listed case, including Defendant's Response ("Doc. No. 93") and Plaintiff's Reply ("Doc. No. 96"). *Realtime v. Echostar Corp.*, Case No. 6:17-cv-84.

Plaintiff alleges Defendant infringes certain asserted claims of the '728 Patent, the '530 Patent, and the '908 Patent. Plaintiff states that the '728 Patent involves “content compression.” (Doc. No. 46 at 2.) Plaintiff alleges that the “patent[] [is] directed to systems and methods of digital-data compression utilizing different techniques based on the specific content of the data.” *Id.* Plaintiff maintains that the patent utilizes data within a data block and identifies one or more parameters of the content of that data. *Id.*

The '728 Patent is entitled “Data Compression Systems and Methods.” The '728 Patent claim 1 is representative of the claims set forth:

1. A system for compressing data comprising;
a processor;
one or more content dependent data compression encoders;
and
a single data compression encoder;
wherein the processor is configured:
to analyze data within a data block to identify one or more
parameters or attributes of the data wherein the analyzing of the data within the data block to identify the one or more parameters or attributes of the data excludes analyzing based solely on a descriptor that is indicative of the one or more parameters or attributes of the data within the data block;
to perform content dependent data compression with the one or more content dependent data compression encoders if the one or more parameters or attributes of the data are identified; and
to perform data compression with the single data compression encoder, if the one or more parameters or attributes of the data are not identified.

The '530 and '908 Patents are related and share substantially similar specifications. The patents are entitled “System and Methods for Accelerated Data Storage and Retrieval” and are described by Plaintiff as a “data acceleration” family. (Doc. No. 46 at 3.) These claims address problems with modern disk storage limited by physical media restrictions by “utiliz[ing] a plurality of different compression techniques and, optionally, a post-compression descriptor,

which would indicate the compression algorithm that was used on a particular data block.” *Id.* at 4 (citing ’530 Patent at 12:38–40). Claim 1 of the ’908 Patent is representative of the claims set forth:

1. A system comprising:
a memory device; and
a data accelerator configured to compress: (i) a first data block with a first compression technique to provide a first compressed data block; and (ii) a second data block with a second compression technique, different from the first compression technique, to provide a second compressed data block;
wherein the compressed first and second data blocks are stored on the memory device, and the compression and storage occurs faster than the first and second data blocks are able to be stored on the memory device in uncompressed form.

The ’530 Patent claim 1 indicates:

1. A system comprising:
a memory device; and
a data accelerator, wherein said data accelerator is coupled to said memory device, a data stream is received by said data accelerator in received form, said data stream includes a first data block and a second data block, said data stream is compressed by said data accelerator to provide a compressed data stream by compressing said first data block with a first compression technique and said second data block with a second compression technique, said first and second compression techniques are different, said compressed data stream is stored on said memory device, said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form, a first data descriptor is stored on said memory device indicative of said first compression technique, and said first descriptor is utilized to decompress the portion of said compressed data stream associated with said first data block.

LEGAL STANDARD

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent’s intrinsic evidence to define the patented invention’s scope. *Id.* at 1313–14; *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the rest of the specification and the prosecution history. *Phillips*, 415 F.3d at 1312–13; *Bell Atl. Network Servs.*, 262 F.3d at 1267. The Court gives claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003). Claim language guides the Court’s construction of claim terms. *Phillips*, 415 F.3d at 1314. “[T]he context in which a term is used in the asserted claim can be highly instructive.” *Id.* Other claims, asserted and unasserted, can provide additional instruction because “terms are normally used consistently throughout the patent.” *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

“[C]laims ‘must be read in view of the specification, of which they are a part.’” *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995)). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficoso N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning than it would otherwise

possess, or disclaim or disavow some claim scope. *Phillips*, 415 F.3d at 1316. Although the Court generally presumes terms possess their ordinary meaning, this presumption can be overcome by statements of clear disclaimer. See *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343–44 (Fed. Cir. 2001). This presumption does not arise when the patentee acts as his own lexicographer. See *Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may also resolve ambiguous claim terms “where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone.” *Teleflex, Inc.*, 299 F.3d at 1325. For example, “[a] claim interpretation that excludes a preferred embodiment from the scope of the claim ‘is rarely, if ever, correct.’” *Globetrotter Software, Inc. v. Elan Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, “[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988); see also *Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of the patent. *Home Diagnostics Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) (“As in the case of the specification, a patent applicant may define a term in prosecuting a patent.”). The well-established doctrine of prosecution disclaimer “preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *Omega Eng’g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). The prosecution history must show that the

patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002); *see also Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 994 (Fed. Cir. 2003) (“The disclaimer . . . must be effected with ‘reasonable clarity and deliberateness.’”) (citations omitted)). “Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover.” *Spectrum Int’l v. Sterilite Corp.*, 164 F.3d 1372, 1378-79 (Fed. Cir. 1988) (quotation omitted). “As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public’s reliance on definitive statements made during prosecution.” *Omega Eng’g, Inc.*, 334 F.3d at 1324.

Although “less significant than the intrinsic record in determining the legally operative meaning of claim language,” the Court may rely on extrinsic evidence to “shed useful light on the relevant art.” *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help the Court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how terms are used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the Court in determining the particular meaning of a term in the pertinent field, but “conclusory, unsupported assertions by experts as to the definition of a claim term are not useful.” *Id.* Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.*

In patent construction, “subsidiary fact finding is sometimes necessary” and the court “may have to make ‘credibility judgments’ about witnesses.” *Teva v. Sandoz*, 135 S.Ct. 831, 838 (2015). In some cases, “the district court will need to look beyond the patent’s intrinsic evidence

and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period.” *Id.* at 841. “If a district court resolves a dispute between experts and makes a factual finding that, in general, a certain term of art had a particular meaning to a person of ordinary skill in the art at the time of the invention, the district court must then conduct a legal analysis: whether a skilled artisan would ascribe that same meaning to that term *in the context of the specific patent claim under review.*” *Id.* (emphasis in original). When the court makes subsidiary factual findings about the extrinsic evidence in consideration of the “evidentiary underpinnings” of claim construction, those findings are reviewed for clear error on appeal. *Id.*

DISCUSSION

The parties dispute the meaning of the following claim terms, which are set forth herein:

I. DISPUTED CLAIM TERMS

A. “content dependent data compression encoders” / “content dependent data compression” (the ’728 Patent, Claims 1, 5, 9, and 25)

Plaintiff’s Proposal	Defendant’s Proposal
“content dependent data compression” means compression using one or more encoders selected based on the encoder’s (or encoders’) ability to effectively encode the data type or content of the data block	[encoder(s) / compression] that is applied to input data that is not compressed with [a single data compression encoder / the single data compression encoder], the compression using one or more encoders selected based on the encoder’s (or encoders’) ability to effectively encode the data type or content of the data block

Plaintiff states that the preferred embodiment of this claim term does not prohibit data compressed with “content dependent” compression from being also compressed with “single data compression” or vice versa. (Doc. No. 46 at 7.) Plaintiff argues that the additional language in Defendant’s proposed construction “is inconsistent with the plain meaning and the intrinsic evidence.” *Id.* Defendant argues that “[p]roper construction of this term requires that

an uncompressed input data be compressed with either one of two possible sets of encoders defined in the claim language—but never both,” and Defendant cites prior cases involving Plaintiff where similar constructions were accepted. (Doc. No. 93 at 5–6.) Defendant also cites claim language as well as disclosures in the specification that support its position that there is a “single data compression encoder.” *Id.* at 7–13. Plaintiff replies that Defendant “seeks to import a limitation that is not directed to the compression or encoder, but is instead an extraneous restriction on the input data to which it is applied.” (Doc. No. 96 at 1.) Plaintiff argues that “[t]he claims plainly *do not* exclude a situation where that input data was already compressed with another encoder . . . before or after the content dependent compression is applied to that input data.” *Id.* at 1–2 (emphasis in original).

Upon review, the Court finds that the Plaintiff’s proposal is correct. The ’728 Patent shows that it performs data compression “with one or more content data compression encoders if the one or more parameters or attributes of the data are identified[.]” ’728 Patent at 26:29–32. It does not limit the claim to only non-compressed data, and there is no evidence Plaintiff intended to limit the type of data.

The specification allows for receiving data that has been encoded before it is received. The disclosure regarding Figures 15A and 15B, which the parties have cited and discussed, refers back to Figures 13A and 13B. *See* ’728 Patent at 20:51–56. The written description regarding Figures 13A and 13B states that “[t]he data compression system comprises a counter module 10 that receives as input an uncompressed or *compressed* data stream.” ’728 Patent at 16:3–5 (emphasis added). Figures 15A and 15B, like Figures 13A and 13B, illustrate a “Data Stream” as an input to a data block counter. The specification thus contemplates that the disclosed compression operations may be performed upon data that has already been compressed.

Defendant argues that Figures 16A and 16B, which relate to Figures 15A and 15B, are evidence that the input data is not encoded because it states in the detailed description that “[i]f there are no encoded data blocks having a compression ratio that exceeds the compression ratio threshold limit (negative determination in step 1620), then *the original unencoded input data block* is routed to the content independent encoder[.]” (Doc. No. 93 at 9 (emphasis in original)) (citing ’728 Patent at 22:38–47). Although this disclosure describes a scenario where the data block is unencoded, Figures 16A and 16B are disclosed as being an illustration of “a” mode of operation of the system. ’728 Patent at 20:61–66. Moreover, the ’728 Patent claims are all “comprising” claims, which can encompass additional features so long as the recited limitations are satisfied. *See Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367, 1371–72 (Fed. Cir. 2005). As noted above, the accompanying disclosure regarding Figures 13A and 13B notes that the input may be a “compressed data stream.” ’728 Patent at 16:3–5.

At the April 5, 2018 hearing, Defendant attempted to distinguish this disclosure regarding a “compressed data stream” by arguing that the parties’ dispute does not concern the input to the counter 10 in Figure 15A but rather concerns the line between the threshold test and the content independent encoders in Figure 15B. Defendant thus attempted to reemphasize the disclosure that “the original unencoded input data block is routed to the content independent encoder.” ’728 Patent at 22:41–47. Yet, Defendant did not adequately address this argument, because the specification suggests that the “original unencoded input data block” may already have been compressed as part of the input data stream. *Id.* at 16:3–5, 22:41–47. The Court therefore finds that there is no evidence that precludes data that was compressed with “content dependent” compression from also being compressed with some other compression or vice versa.

Finally, although in prior cases Plaintiff agreed to phrasing similar to what Defendant has proposed here for claims 1 and 25 of the '728 Patent, Defendant has not demonstrated that any estoppel applies. First, the *Rackspace* and *NetApp* cases Defendant relies on involved an agreed-upon claim construction from Plaintiff. *Realtime Data, LLC v. Rackspace US, Inc.*, No. 6:16-cv-961, Dkt No. 183, at 35 (E.D. Tex. Jun. 14, 2017); *NetApp, Inc. v. Realtime Data LLC*, IPR2017-01354, Paper No. 12, at 9 (PTAB Aug. 15, 2017). Further, the *Actian* claim construction proceedings cited by Defendant involved different issues as to the claims of a different patent. *See Realtime Data LLC v. Actian Corp.*, Case No. 6:15-CV-463 (“*Actian*”), Doc. No. 362 at 20–21 (E.D. Tex. Jul. 28, 2016). Upon review of the parties’ arguments, the Court finds the claims should be construed so that “content dependent data compression” means “compression using one or more encoders selected based on the encoder’s (or encoders’) ability to effectively encode the data type or content of the data block.”

B. “one or more data compression encoders” / “one or more encoders” (the '728 Patent, Claim 24)

Plaintiff’s Proposal	Defendant’s Proposal
No construction necessary	[encoder(s) / compression] that is applied to input data that is not compressed with [a default data compression encoder / the default data compression encoder], the compression using one or more encoders selected based on the encoder’s (or encoders’) ability to effectively encode the data type or content of the data block

Plaintiff asks for no construction on this claim term, and maintains that the language of the patent is appropriate to show that there is “one or more [data compression] encoders” in the construction. (Doc. No. 46 at 8.) Defendant argues that the claim shows that there is a mutually exclusive relationship where “[a]n encoder cannot simultaneously be both ‘default’ and ‘selected’ based on its ability to encode data type or content.” (Doc. No. 92 at 13.) Defendant maintains that its proposal is consistent with the Court’s other prior constructions of “closely

related terms featuring similar mutually exclusive relationships between two sets of encoders in a single claim.” *Id.* at 15. Plaintiff replies that Defendant’s construction should be rejected because it puts extraneous limitations into plain phrases. (Doc. No. 96 at 5.)

The terms “one or more data compression encoders” and “one or more encoders” present substantially the same dispute addressed above as to the “content dependent data compression” terms. For the reasons discussed above, the evidence presented does not support the finding that the claims are limited as Defendant argues. In addition, unlike Claim 1 of the ’728 Patent, Claim 24 does not recite the term “content dependent.” This omission demonstrates that Plaintiff did not intend to limit the terms in the manner urged by Defendant. The terms describe the system where one or more encoders are used to compress data. ’728 Patent 28:12–30 (detailing the system where the data block is compressed with one or more encoders based on their parameters or attributes). Having resolved the parties’ dispute, the claim terms “one or more data compression encoders” and “one or more encoders” do not require further construction.

C. “a single data compression encoder” / “the single data compression encoder” (the ’728 Patent, Claims 1, 6, 10, 24, and 25)

Plaintiff’s Proposal	Defendant’s Proposal
No construction necessary	<p>an encoder that is applied to input data that is not compressed with [content dependent data compression encoders / content dependent data compression], the compression applied without regard to the encoder’s ability to effectively encode the data type or content of the data block.</p> <p>Alternatively, the [a single data compression encoder / the single data compression encoder] is an encoder used automatically in the absence of a designated alternative.</p>

Plaintiff maintains that the plain and ordinary meaning of the terms are clear, and nothing in the plain meaning indicates that the terms are equivalent to “content independent” compression, nor is there any intrinsic evidence establishing this. (Doc. No. 46 at 9–10.)

Defendant argues that its proposed construction is necessary, as shown from prior agreements for this construction. (Doc. No. 93 at 16.) Defendant argues that the written description for the '728 Patent “repeatedly juxtaposes content dependent data compression with content independent data compression” but does not use “content independent” anywhere in the patent claims. *Id.* at 16–17. Defendant maintains that the claims instead describe a first set of compression encoders that are “relative to the mutual exclusion of a second set of compression encoders . . . and vice versa.” *Id.* Defendant states that “[t]he relationship is mutually exclusive because the same original unencoded input data block is never doubly compressed with the first set followed by the second set, such that the output of the first set is never routed into the input of the second set.” *Id.* Plaintiff maintains the construction should be rejected because it imports improper limitations and there is no showing these encoders are independent. (Doc. No. 96 at 5–6.)

Similar to above, Defendant has not shown how the use of the term “single” specifically relates to the written descriptions reciting “content independent.” Here, the terms describe a scenario where the data compression uses a single data compression encoder, and omits the term “content independent.” *See, e.g.,* '724 Patent at 26:29–48 (“A system for compressing data comprising; a processor; one or more content dependent data compression encoders; and a single data compression encoder[.]”). This demonstrates that Plaintiff did not intend to limit the terms in the manner urged by Defendant. Further, although Defendant argues its proposal is similar to prior constructions, the Court notes again that the prior constructions were agreed-to or did not involve the '728 Patent specifically. (*See* Doc. Nos. 93-2, 93-3, 93-5.) Limiting the claims so that “single” means “content independent” would therefore be improper. Having resolved the parties’ dispute, the terms “a single data compression encoder” and “the single data compression encoder” require no further construction.

D. “compressing with a first encoder” (the ’530 Patent, Claim 18)

Plaintiff’s Proposal	Defendant’s Proposal
No construction necessary	compressing with an encoder capable of the first compression technique, different from the second compression technique

Defendant argues for a construction on “compressing with a first encoder” because it “explains to the jury in the context of a different claim that the first encoder [of the patent] is capable of the first compression technique, rather than the second compression technique, thereby defining the scope of that claim.” (Doc. No. 48 at 6.) Defendant maintains this is supported by the specification, which shows “that each compression technique is associated with a different encoder.” *Id.* At the April 5, 2018 hearing, Defendant similarly asserted that “each encoder lines up with a different compression technique.” Plaintiff argues that Defendant could not “justify rewriting ‘first encoder’ as a 14-word extraneous phrase.” (Doc. No. 52 at 1.) Plaintiff argues that it makes no sense and the construction wastes time. *Id.*

The Court finds no support for Defendant’s proposal. Claim 1 of the ’530 Patent, on which claim 18 depends, expressly recites that the “first and second compression techniques are different.” Defendant’s proposal conflates these terms by requiring the “first encoder” to satisfy a requirement that is recited in claim 1 as to the “first compression technique.” Contrary to this proposal, claim 18 recites that the first compression technique *comprises* compressing with a first encoder. Defendant’s construction is therefore confusing and unnecessary, and appears to be contrary to the language in the claim. Having resolved the parties’ dispute, “compressing with a first encoder” requires no further construction.

E. “communications channel” (the ’908 Patent, Claim 25)

Plaintiff’s Proposal	Defendant’s Proposal
No construction necessary	connection to an external source

During the hearing on April 5, 2018, the parties stipulated that this term did not require construction.

II. AGREED CLAIM TERM CONSTRUCTIONS

The parties submitted the following agreed-upon constructions:

Term/Phrase	Agreed Construction
“data block(s)” (’728, claims 1, 2, 9, 10, 15, 20, 24, 25)	“a single unit of data, which may range in size from individual bits through complete files or collection of multiple files.”
“compressing / compressed / compression” (’728, claims 1, 4, 5, 6, 9, 10, 15, 20, 24, 25)	“[representing / represented / representation] of data with fewer bits”
“data” (’728, claims 1, 2, 5, 6, 9, 10, 15, 20, 24, 25)	“a representation of information”
“analyze / analyzing” (’728, claims 1, 24, 25)	“directly examine / directly examining”
“a default data compression encoder / the default data compression encoder” (’728, claim 24)	“the [a default data compression encoder / the default data compression encoder] is an encoder used automatically in the absence of a designated alternative”
“memory device” (’530, claims 1-4; ’908, claims 1, 2, 4, 6, 21, 22, 25)	“an identified memory device to which data is directed for recording and later retrieval”

“receiving / received” (’530, claim 1; ’908, claim 25)	“[receiving/received] from an external source”
“data accelerator” (’530, claims 1-4; ’908, claims 1, 2, 4, 6)	Means-plus function: Structure: “hardware or software with one or more compression encoders.” Function: ’908 patent: “compress: (i) a first data block with a first compression technique to provide a first compressed data block; and (ii) a second data block with a second compression technique, different from the first compression technique, to provide a second compressed data block” ’530 patent: “compressing said first data block with a first compression technique and said second data block with a second compression technique, said first and second compression techniques are different”

After reviewing the parties’ agreed constructions in light of the asserted claims, specification, and prosecution history, the Court finds the parties’ agreed constructions appropriate and construes the terms as set forth above.

CONCLUSION

For the foregoing reasons, the Court adopts the constructions set forth above.

So ORDERED and SIGNED this 25th day of April, 2018.


JOHN D. LOVE
UNITED STATES MAGISTRATE JUDGE